

USSN 09/408,716  
Attorney Docket No. 01413.0011-00000

**AMENDMENTS TO THE SPECIFICATION:**

**Replace the paragraph on page 1, at lines 9-12, with the following paragraph:**

U.S. Patent Application Ser. No. 09/410,367, entitled "DATA PROCESSING, ANALYSIS, AND VISUALIZATION SYSTEM FOR USE WITH DISPARATE DATA TYPES," filed on the date herewith by Jeffery Saffer, et al. [[[.]]]

**Replace the paragraph on page 7, at lines 2-15, with the following paragraph:**

Before information may be displayed interactively so that a user can explore and discover knowledge, it must be processed into a condition suitable for display. Although this processing is described in detail in U.S. Patent Application Ser. No. 09/410,367, entitled "DATA PROCESSING, ANALYSIS, AND VISUALIZATION SYSTEM FOR USE WITH DISPARATE DATA TYPES," it may be described briefly as follows. First, the information represented by the records (including text, numeric, categoric, and sequence / string data) is received in electronic form. Second, the records are analyzed to produce high-dimensional vectors, which are indexed. Third, the high-dimensional vectors are grouped in space to identify relationships. Fourth, the high-dimensional vectors are converted to a two dimensional representation for viewing purposes, generally referred to herein as "projection." Fifth, the projections may be viewed in different formats according to user-selected options. Each view is linked to an index (or indices), such that a user selection in one view propagates to other views.

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**Replace the bridging paragraph which starts on page 7, at line 22, and ends on page 8, at line 11, with the following paragraph:**

Fig. 3 describes one method of displaying information interactively, in the form of a two-dimensional surface map. The method begins with the user selecting a set of records and a set of attributes associated with those records (step 305). The attributes may comprise any of numerous data types, including the following: numeric, text, sequence (e.g., protein or DNA sequences), or categoric. The selected attributes are converted into numerical values, as explained in U.S. patent application Ser. No. 09/410,367, entitled "DATA PROCESSING, ANALYSIS, AND VISUALIZATION SYSTEM FOR USE WITH DISPARATE DATA TYPES" (step 310). A set of graphic images are defined, wherein each graphic image represents a range of values (step 315). At one extreme, this range of values may consist of a single value. In one implementation, gray-scale or color rectangular blocks are used as graphic images, with each shade or color representing a distinct range of values. The user may select from a list of predefined color schemes or may independently define a color scheme and its associated range of values.

**Replace the bridging paragraph which starts on page 10, at line 24, and ends on page 11, at line 12, with the following paragraph:**

Furthermore, any selections made by the user on a surface map are propagated to other views. For example, in response to receiving input from a user selecting a record in surface map 405, an index is analyzed to determine if the record is shown in another view (step 330). This index is described more fully above in U.S. Patent Application Ser. No. 09/410,367, entitled "DATA PROCESSING, ANALYSIS, AND VISUALIZATION SYSTEM FOR USE WITH DISPARATE DATA TYPES." If the record

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is shown in another display (step 335), the visual representation of that record in the other view is altered (step 340). Fig. 6 is a diagram showing both map 405 and a galaxy view of records 605. If a record is selected on map 405, the record is highlighted in galaxy view 605, and vice versa. Similarly, selecting a group of records on map 405 (as shown by 610) causes the corresponding group of records to be highlighted in galaxy view 605 (as shown by 615), and vice versa.